Abstract

A method and a system for converting heat energy contained in fluids as noticeable or latent heat to mechanical energy, wherein a working fluid is evaporated by means of the heat energy, if necessary after transformation to a higher temperature level, by means of one or more series-connected heat pumps and expanded in an expansion device, and wherein the heat energy is at least partially converted to mechanical energy. The expansion occurs in a low-pressure expansion device and the energy contained in the expanded evaporated working fluid is recyclable into the evaporating device in an evaporating unit, which is usable for evaporating additional working fluid.